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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,289	07/14/2005	Brian Jones	01898-25808.US	5179

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EXAMINER	
THERKORN, ERNEST G	

ART UNIT	PAPER NUMBER
1797	

MAIL DATE	DELIVERY MODE
04/03/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/505,289	JONES ET AL.	
	Examiner	Art Unit	
	Ernest G. Therkorn	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) *18-33* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/14/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. 102(B) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sutton (U.S. Patent No. 6,103,112). The claims are considered to read on Sutton (U.S. Patent No. 6,103,112). However, if a difference exists between the claims and Sutton (U.S. Patent No. 6,103,112), it would reside in optimizing the steps of Sutton (U.S. Patent No. 6,103,112). It would have been obvious to optimize the steps of Sutton (U.S. Patent No. 6,103,112) to enhance separation.

Claims 5, 6, 9, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutton (U.S. Patent No. 6,103,112) in view of Nickerson (U.S. Patent No. 6,423,120). At best, the claims differ from Sutton (U.S. Patent No. 6,103,112) in reciting up to several hundred watts. Nickerson (U.S. Patent No. 6,423,120) (column 5, lines 35-45) discloses a typical heater must be configured from 60 watts to achieve reasonable heat-up rates. It would have been obvious to use 60 watts in Sutton (U.S. Patent No. 6,103,112) because Nickerson (U.S. Patent No. 6,423,120) (column 5, lines

35-45) discloses a typical heater must be configured from 60 watts to achieve reasonable heat-up rates.

The remarks urge Sutton (U.S. Patent No. 6,103,112) does not rapidly heat his fluid. However, Sutton (U.S. Patent No. 6,103,112) on column 13, lines 9-13 and lines 32-35 discloses rapid and precise heating and cooling.

The remarks urge that Sutton (U.S. Patent No. 6,103,112) does not heat the fluid prior to entry into the column. However, Sutton (U.S. Patent No. 6,103,112) on column 12, lines 19-23 discloses use of a coil of capillary tubing prior to the column to establish heat transfer contact with the outer surface. As such, Sutton (U.S. Patent No. 6,103,112) discloses rapid heating or cooling of the fluid through the tubing before the fluid enters the column.

The remarks urge that Sutton (U.S. Patent No. 6,103,112) does not disclose claim 10's sensor. However, an inspection of Figure 7 reveals that temperature sensor 118 is closer to that portion of tubing 114 closer to column 106 than emerging from prefilter 98.

The remarks urge that Sutton (U.S. Patent No. 6,103,112) does not measure the temperature in the tubing. However, Sutton (U.S. Patent No. 6,103,112) on column 14, lines 7-20 discloses mounting the sensor on the tubing.

The remarks urge that the examiner has admitted that there is a difference between the claims and Sutton (U.S. Patent No. 6,103,112) based upon the limitation of use of up to several hundred watts. Rejecting the claims that have that limitation as being anticipated by Sutton (U.S. Patent No. 6,103,112) is not considered to be an

admission of a difference. The claims have been rejected as being anticipated by Sutton (U.S. Patent No. 6,103,112) because Sutton (U.S. Patent No. 6,103,112) inherently discloses that feature because its column 12, lines 42-45 resistance heater would have to use that much power to achieve Sutton (U.S. Patent No. 6,103,112)'s column 13, lines 9-13 and lines 32-35 rapid and precise heating and cooling. The supplemental back-up rejection of claims 5, 6, 9, and 15 employs the phrase "At best, the claims differ." This is not considered to be an admission.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (571) 272-1149. The official fax number is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ernest G. Therkorn/
Ernest G. Therkorn
Primary Examiner
Art Unit 1797

EGT
March 24, 2008